

**“UNPARALLELED PERFORMANCE AND SAFETY UNDER PRESSURE!”<sup>®</sup>**

ExpanTek<sup>®</sup>

## Model 30 Series Tube Expansion Tools



- Pressures up to 10,000 psi (689 bar)
- 0.13 in. to 1.00 in. OD (3.2 mm to 25.4 mm OD)
- Seals plain end tubing
- Collet grip and seal on tube OD
- Spring-actuated grip release

### DESCRIPTION

The ExpanTek<sup>®</sup> Model 30 Series Expansion Tool offers fast, snap-on coupling and positive sealing for high-pressure expansion of tubes. When the tool is used with a high-pressure power source, it will quickly expand tubing for HVAC applications and tubular assemblies. The tool can be used with a variety of services, such as water, oil, and other liquids.

This precision-machined tool is made from heat-treated stainless steel to provide long, trouble-free service for high-pressure expansion applications. Its compact, balanced design is beneficial for applications with limited space area.

The Model 30 Series Tool expands standard and metric tube, and fitting sizes from 0.13 in. to 1.00 in. (3.2 mm to 25.4 mm) in diameter. Special tube sizes and tool configurations will be considered upon request.

### OPERATION

Connect the Model 30 Tool to the pressure line using the optional NuQuip<sup>®</sup> Automatic Air-Bleed Valve attached on the cap side of the tool. Push the tube into the tool until pressed against the internal stop. The collets are activated for positive grip when the service line is pressurized to approximately 50 psi (3.4 bar). Continue to pressurize the tube until desired expansion is reached, **but do not exceed maximum operating pressure**. After the tube expands and the service line pressure drops to 0 psi/bar, the collets will automatically release for quick removal of the tool from the tube.

### APPLICATION

The ExpanTek<sup>®</sup> Model 30 Series Tube Expansion Tool is a snap-on tool suitable for high-pressure expansion of tubes with standard OD tolerances and maximum working pressure up to 10,000 psi (689 bar). This unique tool when used with a high-pressure system will rapidly expand tubing for refrigeration coils, boilers, tubular assemblies, and many other applications.

### MATERIALS

Body and Collets: Heat-treated, stainless steel

### TOOL CONFIGURATION

Collet Grip and Seal: On tube OD  
Gripping: Normally-open  
Spring-actuated grip release

### OPERATING CONDITIONS

Maximum Pressure: 10,000 psi (689 bar)  
Temperature: 32° F to 120° F (0° C to 49° C)  
Services: Water, oil, and other liquids  
Tube OD Range: 0.13 in. to 1.00 in.  
(3.2 mm to 25.4 mm)  
OD Tolerance: Standard tube tolerances

**MAXIMUM PRESSURE**  
**10,000 psi**  
**689 bar**

ExpanTek®

## Model 30 Series

Tube Expansion Tools

### Model 30 Series Tool Specifications

Tube OD Range*				Overall Length		Body Diameter		Minimum Orifice		Minimum Tube Swallow		Standard Port
Inches		MM										
Min.	Max.	Min.	Max.	Inches	MM	Inches	MM	Inches	MM	Inches	MM	
0.13	0.39	3.2	10.0	5.91	150.0	1.00	25.4	0.09	2.4	0.71	18.0	1/4" NPT
0.40	0.52	10.0	13.3	6.11	155.1	1.25	31.8	0.23	5.8	0.68	17.3	3/8" NPT
0.52	0.66	13.3	16.6	6.13	155.7	1.44	36.6	0.35	8.8	0.71	18.0	3/8" NPT
0.66	0.77	16.7	19.6	6.46	164.1	1.75	44.5	0.50	12.7	0.68	17.3	3/8" NPT
0.77	1.00	19.7	25.4	5.72	145.3	2.25	57.2	0.50	12.7	0.68	17.3	3/8" NPT

\* Note: Tools are designed for a dedicated tube diameter and do not cover the entire diameter range noted at each size. A single tube OD must be specified for the collet set.

*Special Configurations Available Upon Request*  
*Automatic Air-Bleed Valve Recommended for Optimal Performance*

#### FEATURES

- Seals plain end tubing
- Full-flow, high pre fill rate
- Predetermined internal tube stops requires no measuring
- Special collet design locking principle
- Automatic collet release
- Pressure-compensated design
- Built-in tube end tolerances require no square cut ends
- Compact, balance design
- Precision-machined from heat-treated stainless steel
- Designed for tube expansion applications
- Use with optional NuQuip® Automatic Air-Bleed Valve

#### BENEFITS

- Positive sealing for high-pressure expansion
- Decreases cycle time
- Ensures proper tube depth engagement
- Accommodates shorter length of tube
- Fast tool removal after each operation
- Contains all high-pressure loads for safe operation
- Efficient operation saves time
- Ease of use in limited space applications
- Provides long, trouble-free service
- Tools can be used with different test media
- Eliminates operator attendance during fill cycle



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